

# ISDH Indoor Air Quality

Ron Clark

November 2009

# Why Indoor Air Quality

- EPA states indoor air is 5 times more polluted than the outdoor air
- 20 million in US have Asthma (6 million under 18 years old), and we don't know how many have allergies to indoor pollutants

# Regulations

- For the most part there are no regulations for indoor air quality in homes, only guidelines
- IC 16-41-37.5 Instructs ISDH to inspect any school or state government building when we get a complaint of IAQ (exempts colleges and universities)

# So what does our office do?

- Investigate complaints for Schools and State Government Buildings
- Technical support to State agencies and Local Health Departments
- Residential Mold sampling at a Doctor's request (no visible mold)
- Phone consultations to the public

# What testing capabilities do we have?

- Formaldehyde – Glues, adhesives, plywood and particleboard
- Mercury – broken thermometers
- Hydrogen sulfide – sewer gas odors
- VOC's – cleaning solvents or vapor intrusion from leaking storage tanks
- Carbon Dioxide – Indicator of quantity of fresh air
- Various other chemicals

# Radon

- Naturally occurring radioactive gas found in the soil throughout Indiana
- Colorless and odorless gas that can only be detected with instrumentation
- Second leading cause of Lung Cancer (~21,000 deaths / year)

# Radon testing

- Our office licenses radon testers, mitigators, and laboratories.
- We provide a list of all current licensees.
- Indiana Radon Hot Line 800/272-9723

# Mold

- We currently get more complaints and questions regarding mold than all the other IAQ parameters with the exception of radon.



# So, Who's at risk

- Immune compromised
- Children
- Elderly
- Anyone can have a mold allergy

# Types of Symptoms

- Typical allergy symptoms – respiratory irritation, watery eyes, runny nose
- Fungal infections – rarely, most likely with immunocompromised individuals

# What about “TOXIC BLACK MOLD”

- Stachybotrus  
Toxigenic mold  
so is Penicillin

# What documents do we have to prove it is a “Health Risk”

- National Academies – Institute of Medicine

“Damp Indoor Spaces and Health Review” 2004

Looked at Published research to see if there was an association between health symptoms and damp indoor environments or mold

# How do we get rid of the mold?

- 1 - Stop the moisture!
- 2 - Follow a published remediation guide such as: EPA's "Mold Remediation in Schools and Commercial Buildings"

# What are the basic steps

- A - Close off HVAC to area
- B - Isolate area
- C - Remove damaged porous materials
- D - Clean all contaminated surfaces
- E - Dry completely before build back

Note: There are other considerations with flood cleanup.













# Contact information

Ron Clark – Industrial Hygienist

Indoor Air Program

Indiana State Dept of Health

2525 N. Shadeland Ave.

Indianapolis, IN 46219

317.351.7190 ext 256

317.351.2679 fax

[rdclark@isdh.in.gov](mailto:rdclark@isdh.in.gov)